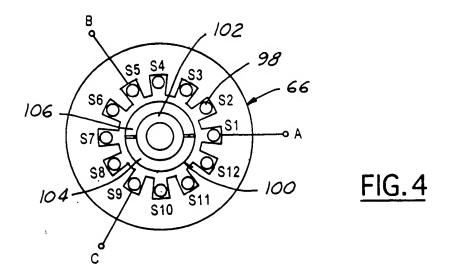
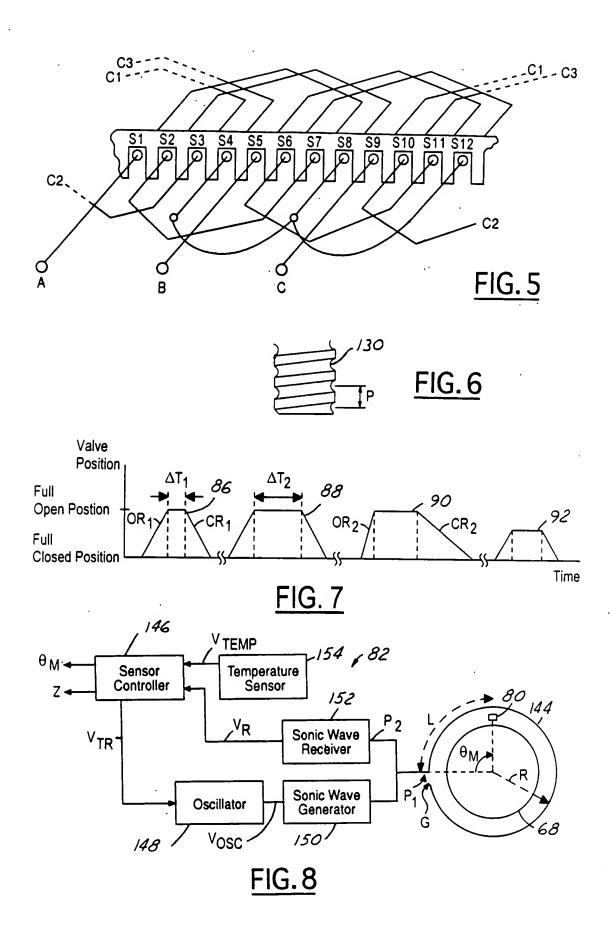
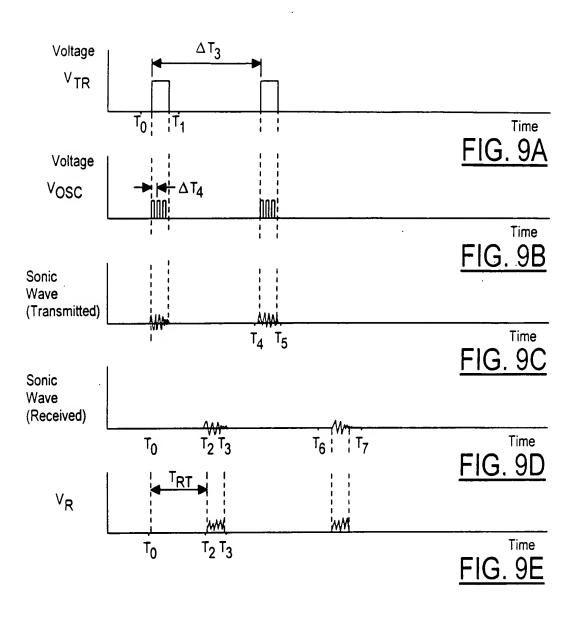
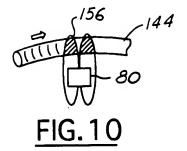


FIG. 3









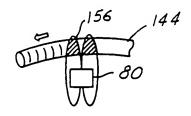


FIG. 11

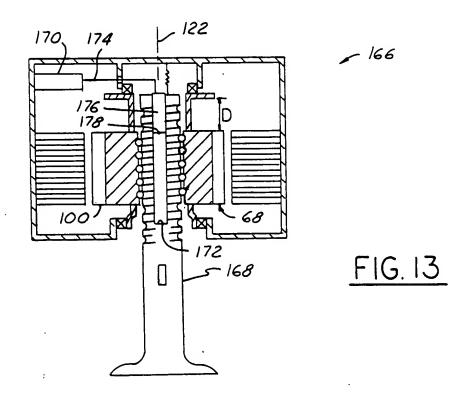
Provide a sonic conduit extending around a substantial portion of a circumference of a rotor wherein a magnet rotates with the rotor.

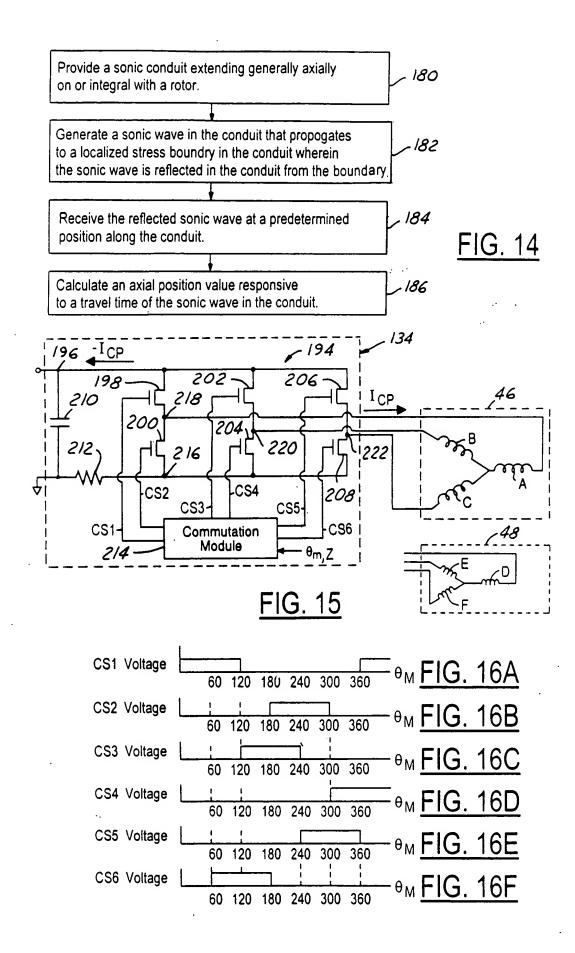
Generate a sonic wave in the conduit that propogates to a localized stress boundry in the conduit wherein the sonic wave is reflected in the conduit from the boundary.

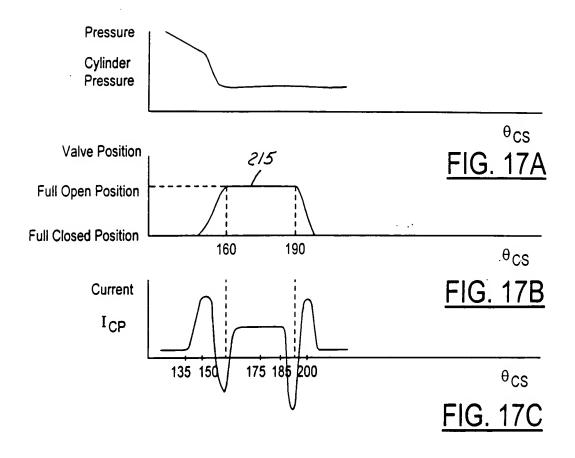
Receive the reflected sonic wave at a predetermined position along the conduit.

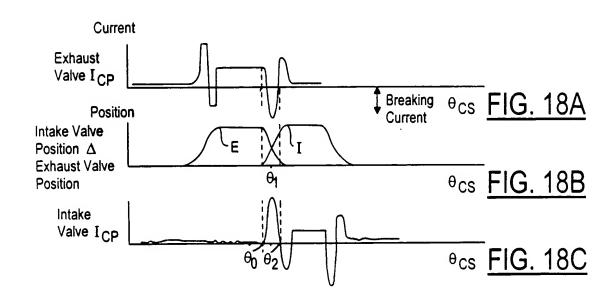
Calculate a rotational position value responsive to a travel time of the sonic wave in the conduit.

FIG. 12









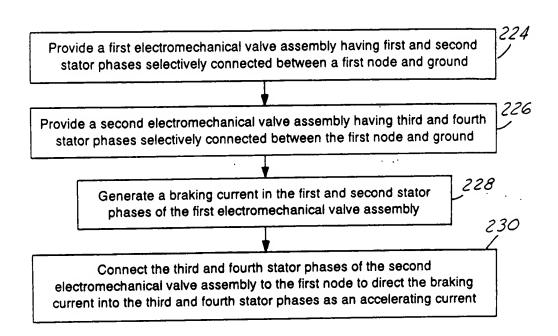


FIG. 19